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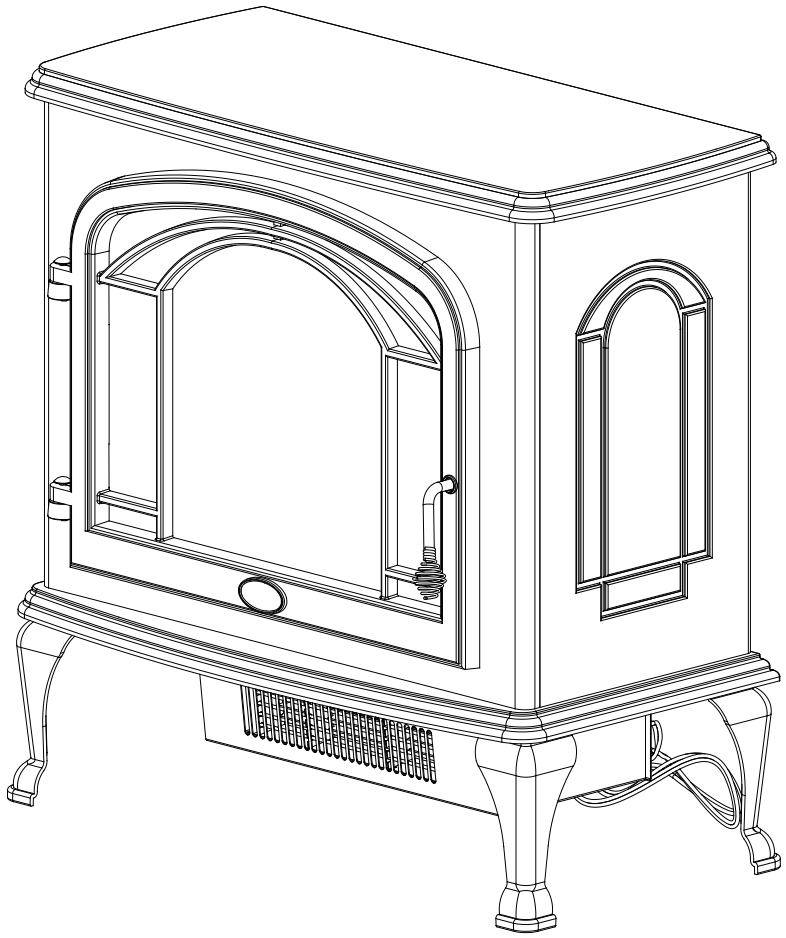

Service Manual

Model Number
DS7420
DS7425DLX

UL Part Number
6900470759
6900471604

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this stove. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

Dimplex North America Limited
1367 Industrial Road • Cambridge ON Canada N1R 7G8
1-888-346-7539 • www.dimplex.com

In keeping with our policy of continuous product development, we reserve the right to make changes without notice.
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Always use a qualified technician or service agency to repair this stove.

! NOTE: Procedures and techniques that are considered important enough to emphasize.

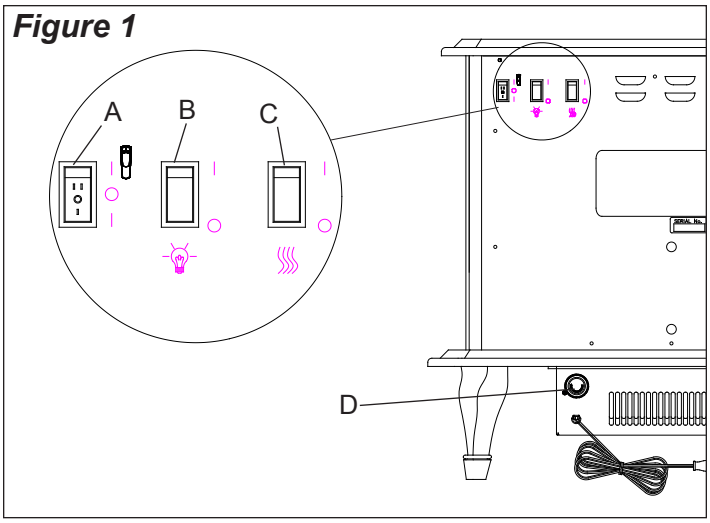
⚠ CAUTION: Procedures and techniques which, if not carefully followed, will result in damage to the equipment.

⚠ WARNING: Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

OPERATION

To access the controls, go to the back of the stove (Figure 1).

Figure 1



A. 3-Position Switch

The switch has two On positions marked with "**I**" and "**II**". The "**I**" position is for manual operation. In this position the built-in remote control is bypassed.

The "**II**" position is for operating the unit with the provided remote control. When in "**II**" position the unit is operated with the ON and OFF buttons of the remote control.

When the switch is in the center position "**O**" the unit is off.

B. Light On/Off Switch

The Light On/Off Switch supplies power to the upper light of the log bed display area.

C. Heater On/Off Switch

The Heater On/Off Switch supplies power to the heater.

D. Heater Thermostat Control

To adjust the temperature to your individual requirements, turn the thermostat control clockwise all the way to turn on the heater. When the room reaches the desired temperature, turn the thermostat knob counter clockwise until you hear a click. Leave in this position to maintain the room temperature at this setting. For additional heat, turn clockwise until you hear the click again and the heater will turn on.

Resetting the Temperature Cutoff Switch

Should the heater overheat, an automatic cut out will turn the heater off and it will not come back on without being reset. It can be reset by switching the 3-Position Switch to Off "**O**" and waiting five (5) minutes before switching the unit back on.

⚠ **CAUTION:** If you need to continuously reset the heater, unplug the unit and call Customer Service at 1-888-346-7539.

Remote Control

The stove is supplied with an integrated On/Off remote control.

! **NOTE:** Ensure that the stove's 3-Position Switch is set to the Remote Control setting ("**II**" position).

To operate, push the ON button to turn stove on, push the OFF button to turn the stove off.

Remote Initialization/Reprogramming

Follow these steps for Remote Control initialization and if required, re-initialization:

1. Disconnect power to stove.
2. Set the 3-Position Switch to the Remote position "II" (Figure 1A).
3. Wait a minimum of five (5) seconds and then re-acquire power to stove.
4. Within 10 seconds of re-acquiring power, press the ON button located on the Remote Control.

! **NOTE:** You will have only 10 seconds to perform this last step. Failure to do so will result in these steps needing to be followed again.

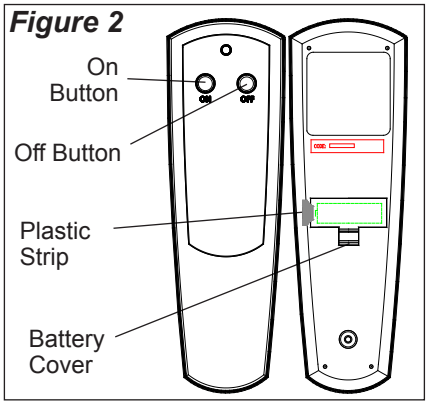
Battery Installation

To install or replace the battery:

1. Slide battery cover open on the Remote Control (Figure 2).
2. Correctly install one (1) 12 Volt (A23) battery in the battery holder.
3. Close the battery cover.

Battery must be recycled or disposed ofproperly. Check with your Local Authority or Retailer for recycling advice in your area.

Figure 2



OPERATION - DS7420 MOD A - D

To access the controls, go to the back of the stove. (Figure 3)

A. MAIN ON/OFF SWITCH

The Main On/Off switch supplies power to all stove functions (heater & flame).

B. TOP LIGHT ON/OFF SWITCH

Controls the light intensity of the log bed display area.

C. HEATER ON/OFF SWITCH

The Heater On/Off switch supplies power to the heater.

D. HEATER THERMOSTAT

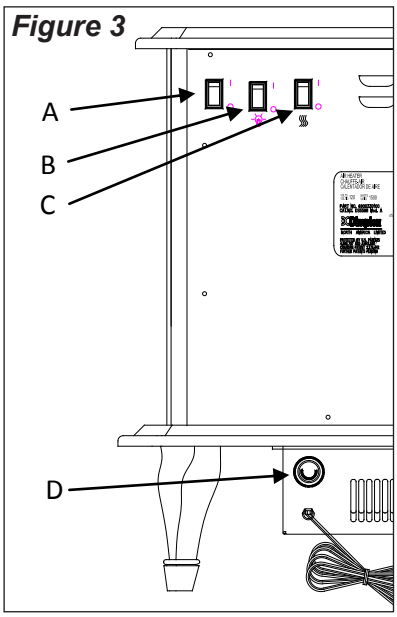
To adjust the temperature to your individual requirements, turn the thermostat clockwise all the way to turn on the heater. When the room reaches the desired temperature, turn the thermostat knob counter clockwise until you hear a click. Leave in this position to maintain the room temperature at this setting. For additional heat, turn clockwise until you hear the click again and the heater will turn on.

RESETTING THE TEMPERATURE CUTOFF SWITCH

Should the heater overheat, an automatic cut out will turn the heater off and it will not come back on without being reset. It can be reset by switching the MAIN ON/OFF SWITCH to OFF and waiting 5 minutes before switching the unit back on.

⚠ **CAUTION:** If you need to continuously reset the heater, unplug the unit and call Dimplex North America Limited at 1-800-668-6663.

Figure 3



REMOTE CONTROL

The remote control has a range of approximately 50ft. (15.25m) it does not have to be pointed at the stove and can pass through most obstacles (including walls). It is supplied with one of 243 independent frequencies to prevent interference with other units. The frequency designation is indicated on the back of the Remote Control (Figure 4)

REMOTE CONTROL INSTALLATION

1. Plug stove power cord into the outlet located on the side of the receiver. (Figure 4)
2. Plug receiver into the wall outlet.
3. Install a 9 volt battery into the Remote Control (Figure 4).

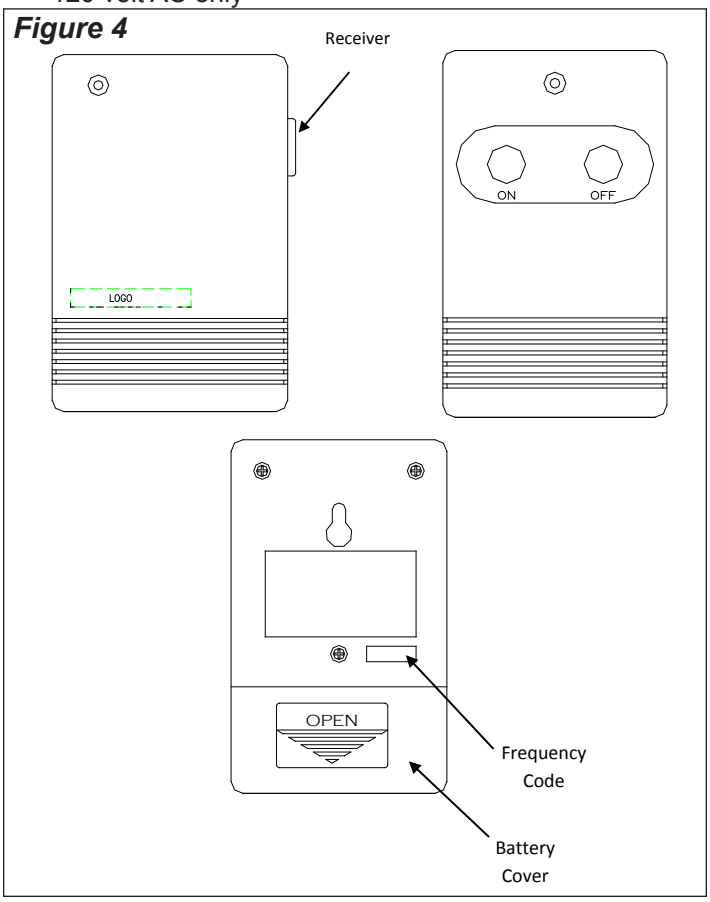
! NOTE:

- Stove Main On/Off switch must be in the ON position prior to using the Remote Control.
- ON/OFF Remote Control may be used to control most other electrical devices including T.V.'s, stereos and lamps.

⚠ **CAUTION:**

- For indoor use in dry areas only
- For use on electrical devices with 15 amp resistive load or 1/3 HP inductive load
- 120 volt AC only

Figure 4



MAINTENANCE

⚠ **WARNING:** Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

Light Bulb Replacement

Allow at least five (5) minutes for light bulbs to cool off before touching bulbs to avoid accidental burning of skin.

Light bulbs need to be replaced when you notice a dark section of the flame or when the clarity and detail of the log exterior disappears.

There are three (3) bulbs under the Log Set Assembly, which generate the flames and embers, and one (1) bulb above that illuminate the log exterior.

Tool Requirements: Phillips screw driver

Helpful Hints: It is a good idea to replace all light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace light bulbs.

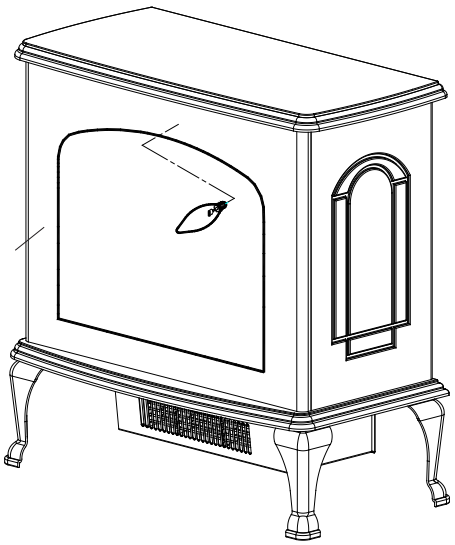
Upper Bulb Requirement: Quantity of one (1) 7 Watt candelabra E12 small base 120 Volt.

Do not exceed 7 Watts per bulb.

Upper Bulb Replacement (Figure 5)

1. Open door by pulling the handle.
2. Locate the upper bulb bracket.
3. Bend light retainer bracket down.
4. Locate and remove light bulb.
5. Insert and install new bulb.
6. Bend light retainer bracket back into its original position.
7. Close the door.

Figure 5



Lower Bulbs Requirement: Quantity of three (3) 35 Watt Halogen Quartz lamps, 120 Volt, G9 Base.

Do not exceed 35 Watts per bulb.

Lower Bulb Replacement

1. Remove the stove pipe kit (if equipped).
2. Gently place stove on its back on a flat surface.
3. Remove the heater cover retaining screws located on the bottom of the stove (Figure 6) and lower heater and light assembly out onto the floor.
4. Remove the burnt out bulb(s) by pulling straight out of socket. If bulbs are difficult to remove form socket move the bulb from side to side while pulling being careful not to damage the light socket.
5. Replace the lower light bulbs.
6. Reassemble in the reverse order as above.

Glass Cleaning

The clear door is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the clear door may collect dust particles. These can be removed by dusting lightly with a clean, dry cloth.

To remove fingerprints or other marks, the clear doors can be cleaned with a damp cloth. The clear door should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners or spray liquids on the clear door surface.

Plastic Door Cleaning

To remove fingerprints or other marks, the clear doors can be cleaned with a damp cloth. The clear door should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners or spray liquids on the clear door surface.

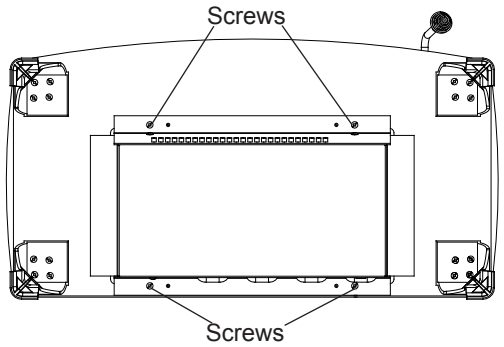
Stove Surface Cleaning

Use warm water only to clean painted surfaces of the Stove. Do not use abrasive cleaners.

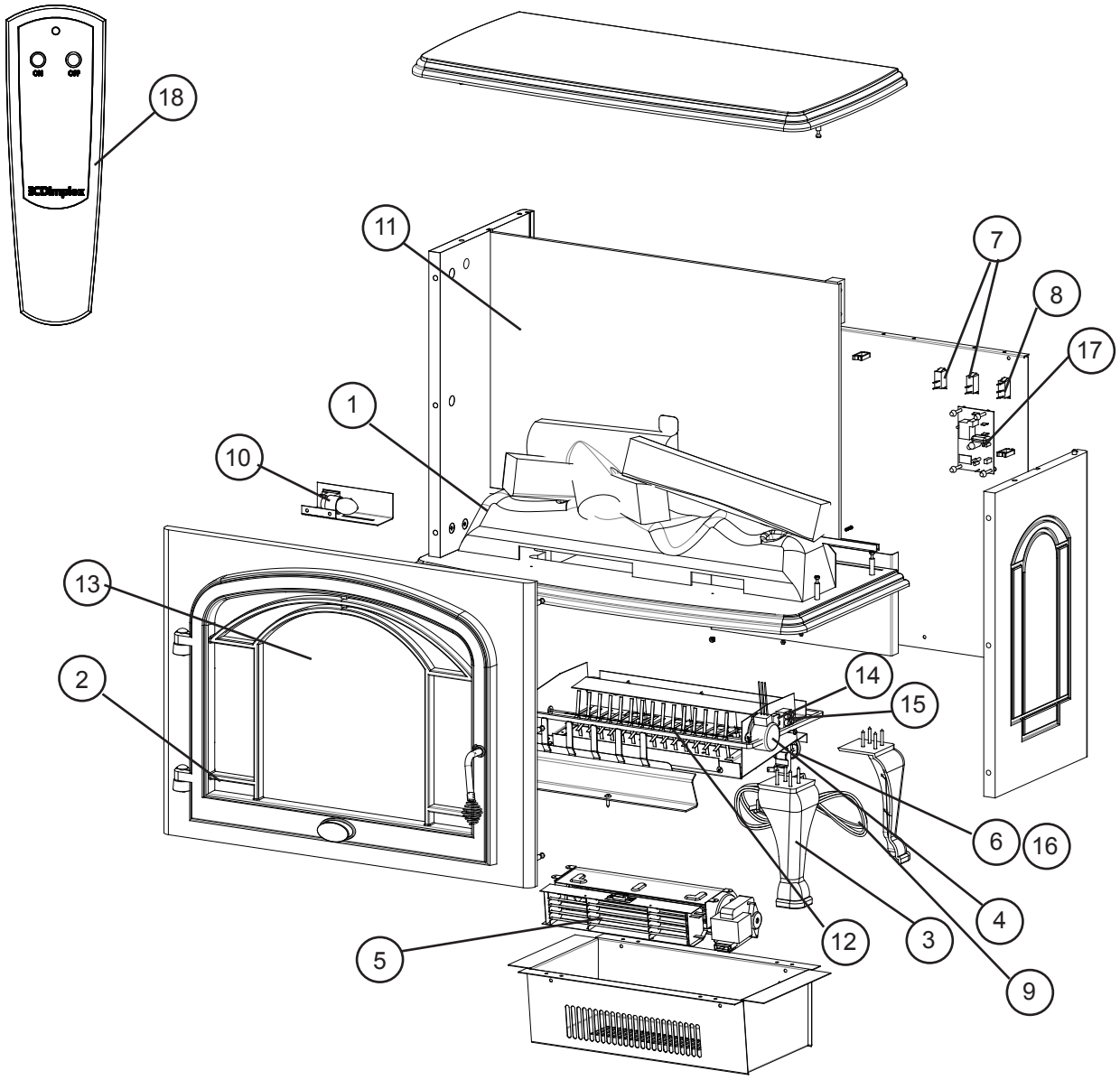
Servicing

Except for light bulb replacement and cleaning described above, an authorized service representative should perform any other servicing.

Figure 6



EXPLODED PARTS DIAGRAM

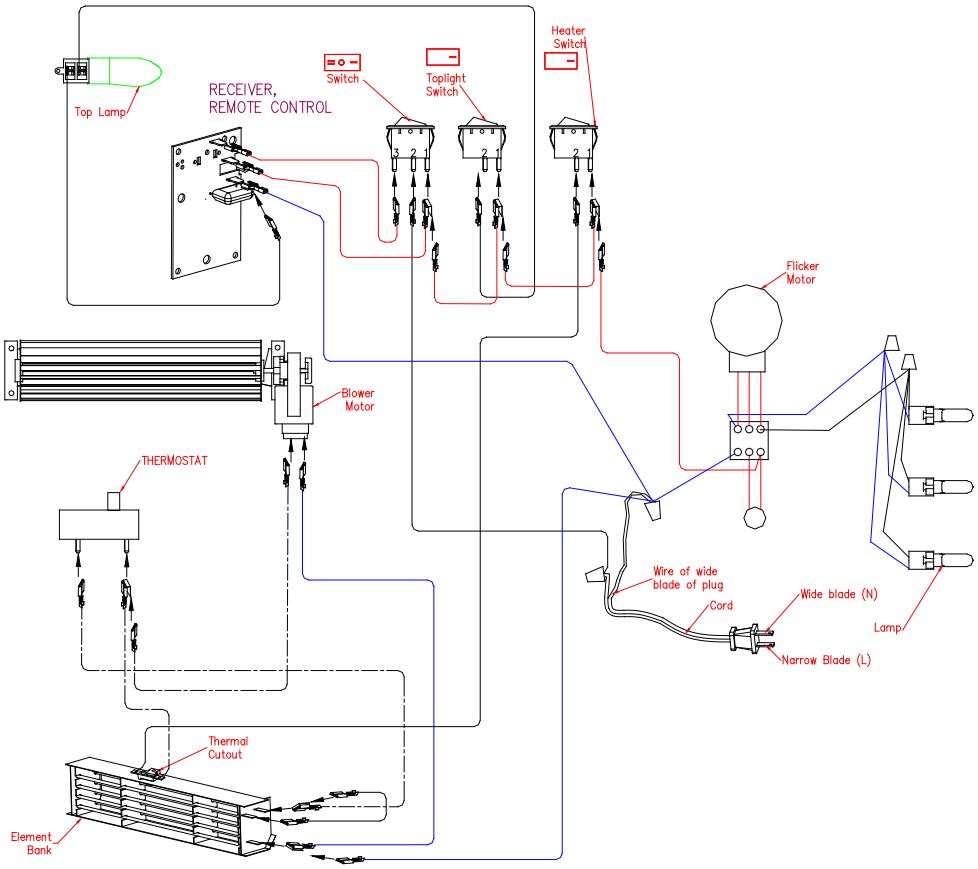


Replacement Parts List

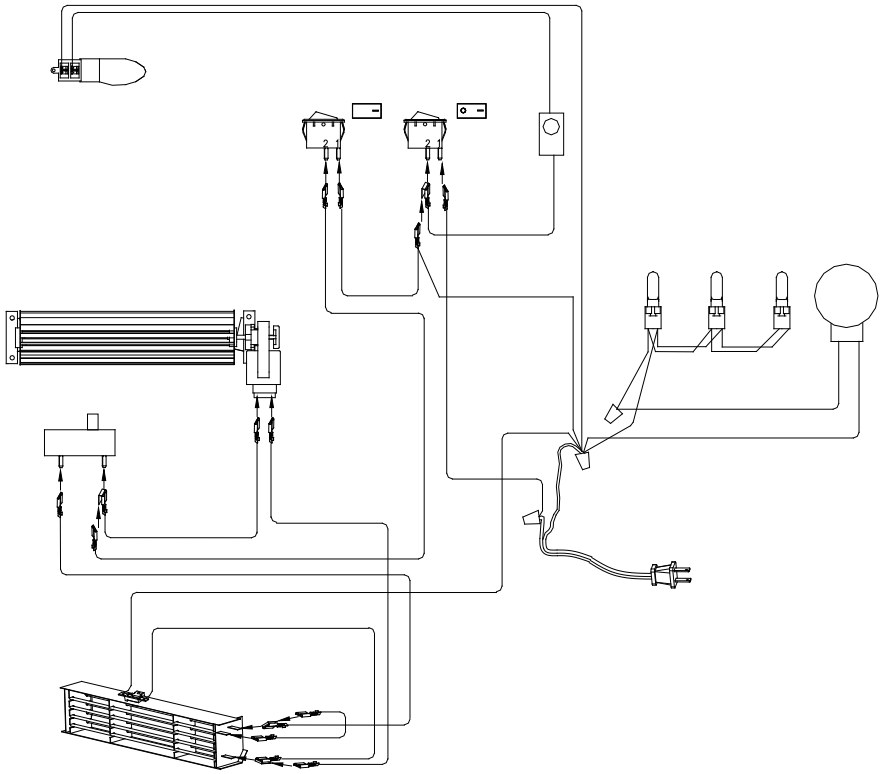
Replacement Part:

1. Log Set DS7420 . . . . . 0438200200RP
   DS7425DLX 0439230200RP
2. Door 0438610100RP
3. Foot 0438680100RP
4. Flicker Motor 2000210200RP
5. Heater Assembly (with cutout) 2200490700RP
6. Thermostat 2300150100RP*
7. On/Off Switch 2800070700RP
8. 3-Position Switch 2800071100RP
9. Power Cord 4100040900RP
10. Upper Light Harness 4200120400RP
11. Partially Reflective Glass 5900060600RP
12. Reflector Assembly 5900080600RP
13. Front Glass 5900440100RP
14. Capacitor 2300030100RP
15. Terminal Block 4000070100RP
16. Control Knob 8800000300RP
17. Remote Control Receiver 3000380200RP
18. Remote Control 3000370500RP
19. LED Log Driver (DS7425DLX) 3000390100RP

WIRING DIAGRAM



DS7420 MOD A - D



TO REPLACE UPPER LIGHT BULB

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

Light bulbs need to be replaced when you notice a dark section of the flame or when the clarity and detail of the log exterior disappears. There is one bulb at the top of the opening that illuminates the log set exterior and two bulbs under the log set which generate the flames and embers.

It is a good idea to replace all of the light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace the light bulbs.

1. Open door by pulling the handle.
2. Locate the upper bulb bracket.
3. Bend light retainer bracket down.
4. Locate and remove the light bulb.
5. Insert new bulb.
6. Bend light retainer bracket back into its original position.
7. Close the door.

UPPER LIGHT BULB REQUIREMENTS: Quantity of 1 clear chandelier or candelabra bulbs with an E-12 (small) socket base, 7 watt rating.

TO REPLACE LOWER LIGHT BULBS

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

Light bulbs need to be replaced when you notice a dark section of the flame or when the clarity and detail of the log exterior disappears. There is one bulb at the top of the opening that illuminates the log set exterior and three bulbs under the log set which generate the flames and embers.

It is a good idea to replace all of the light bulbs at one time if they are close to the end of their rated life. Group replacement will reduce the number of times you need to open the unit to replace the light bulbs.

1. Remove the stove pipe kit (if equipped).
2. Gently place stove on its back on a flat surface.
3. Remove the heater cover retaining screws located on the bottom of the stove and lower heater and light assembly out onto the floor.
4. Remove the burnt out bulb(s) by pulling straight out of socket. If bulbs are difficult to remove form socket move the bulb from side to side while pulling being careful not to damage the light socket.
5. Replace the lower light bulbs.
6. Reassemble in the reverse order as above.

LOWER LIGHT BULB REQUIREMENTS: Quantity of 3 – 35 watt Halogen Quartz lamps, 120 volt, G9 base. DO NOT EXCEED 35 WATTS PER BULB

TO REPLACE ON/OFF OR 3-POSITION SWITCH

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Remove back panel screws located along the rear of the top panel.
2. Open front door and release the cams located in the upper corner of both side panels.

! NOTE: To release cams ensure arrow on cam is facing up.

3. Remove top panel.
4. Locate the switch to be replaced mounted on the rear panel and disconnect the wiring clips and connections noting their original locations.
5. Depress the retainer clips on the rear of the switch and push the switch out of the rear cover.
6. Properly orient the new switch and connect all of the wiring clips and connections.
7. Reassemble in the reverse order as above.

TO REPLACE FLICKER MOTOR/ FLICKER ROD

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Gently place stove on its back on a flat surface.
2. Remove the heater cover retaining screws located on the bottom of the stove and lower heater and light assembly out onto the floor.
3. Remove all of the mounting screws on the heater cover and separate the cover from the heater and light assembly.

4. Locate the flicker motor and flicker rod assembly and remove the wiring clips and connections located by the heater assembly noting their original locations.
5. Remove the flicker motor mounting screws and disconnect the flicker motor from the flicker rod.

! NOTE: When removing the flicker motor some damage may occur to the flicker rod. If flicker rod is damaged replace to insure proper operation.

6. Reassemble in the reverse order as above.

TO REPLACE THERMOSTAT

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Gently place stove on its back on a flat surface.
2. Remove the heater cover retaining screws located on the bottom of the stove and lower heater and light assembly out onto the floor.
3. Remove all of the mounting screws on the heater cover and separate the cover from the heater and light assembly.
4. Locate the thermostat mounted to the heater cover and disconnect the wiring connections noting their original locations.
5. Pull off the thermostat control knob to expose the mounting screws.
6. Remove the mounting screws and remove the heater thermostat.
7. Properly orient the new thermostat and connect all of the wiring connections.
8. Reassemble in the reverse order as above.

TO REPLACE HEATER ASSEMBLY

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Gently place stove on its back on a flat surface.
2. Remove the heater cover retaining screws located on the bottom of the stove and lower heater and light assembly out onto the floor.
3. Remove all of the mounting screws on the heater cover and separate the cover from the heater and light assembly.
4. Locate the heater assembly and disconnect the wiring connections noting their original locations.
5. Remove heater mounting bracket screws and set aside heater assembly.
6. Properly orient the new heater assembly and connect all of the wiring clips and connections.
7. Reassemble in the reverse order as above.

TO REPLACE THE POWER CORD

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Gently place stove on its back on a flat surface.
2. Remove the heater cover retaining screws located on the bottom of the stove and lower heater and light assembly out onto the floor.
3. Remove all of the mounting screws on the heater cover and separate the cover from the heater and light assembly.
4. Locate and disconnect the power cord wiring connections noting their original locations.
5. With needle nose pliers grasp the power cord strain relief grommet from inside the heater cover and push while twisting to remove.
6. Pull the power cord out through the hole in the heater cover.
7. Install the new power cord through the hole in the heater cover and connect all of the wiring connections in their original locations.
8. Install the power cord retaining grommet on the power cord and insert into the hole in the heater cover.
9. Reassemble in the reverse order as above.

TO REPLACE REMOTE CONTROL RECEIVER

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Open door by pulling the handles.
2. Loosen the 2 retainers on the inner sides of the unit by turning counter clockwise.
3. Remove 4 screws that secure the top on the rear of the unit.
4. Lift the top off of the unit. Carefully remove the partially reflective glass and store in a safe place to prevent damage.
5. Locate the Remote Control Receiver on the rear wall of the unit.

6. Remove wiring connections from Remote Control Receiver noting their original locations.
7. From inside the unit, break off the 4 mounting studs by grasping with pliers and twisting on the protruding part of the stud, push the remainder of the studs out through the back panel.

! NOTE: New mounting studs are supplied with the replacement Remote Control Receiver

8. Reassemble in the reverse order as above.

TO REPLACE LOG SET DRIVER BOARD - DS7425DLX MODEL ONLY

WARNING: If unit was operating prior to servicing allow at least 10 minutes for light bulbs and heating element to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of electric shock or damage to persons.

1. Open door by pulling the handles.
2. Loosen the 2 retainers on the inner sides of the unit by turning counter clockwise.
3. Remove 4 screws that secure the top on the rear of the unit.
4. Lift the top off of the unit. Carefully remove the partially reflective glass and store in a safe place to prevent damage.
5. Locate the Log Set Driver on the rear wall of the unit.
6. Remove wiring connections from Log Set Driver noting their original locations.
7. From inside the unit, break off the 4 mounting studs by grasping with pliers and twisting on the protruding part of the stud, push the remainder of the studs out through the back panel.

! NOTE: New mounting studs are supplied with the replacement Log Set Driver

8. Reassemble in the reverse order as above.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
General		
Circuit breaker trips or fuse blows when unit is turned on	Short in unit wiring.	Trace wiring in unit.
	Improper circuit current rating	Additional appliances may exceed the current rating of the circuit breaker or fuse. Plug unit into another outlet or install unit on a dedicated 15 amp circuit.
Unit turns on or off by itself	Remote Control has a similar frequency to other remotes in the area.	Replace Remote Control. Initialize to Remote Control Receiver
	Radio frequency disturbance from outside sources.	Replace Remote Control and Remote Control Receiver where necessary. Initialize Remote Control and Receiver
	Defective Remote Control Receiver	Replace Remote Control Receiver. Initialize to Remote Control and Receiver.
Lights dim in room while the unit is on	Unit is drawing close to circuit current rating	Move the unit to another outlet or install unit on a dedicated 15 amp circuit
Power cord gets warm	Normal Operation	The power cord may get slightly warm to the touch when the heater is on.
	Defective power cord	Replace power cord if cord gets hot to the touch.
Appearance		
Stove does not turn on Manually	Improper operation	Refer to Operation Section
	No incoming power from the electrical wall socket	Check Fuse/Breaker Panel
	Loose wiring	Check wiring connections
	Defective Main On/Off Switch	Replace Main On/Off Switch
	Defective Remote Control Receiver	Replace Remote Control Receiver
Stove does not turn on with Remote Control	Improper operation	Refer to Operation Section
	Remote Control not initialized to stove	Initialize the Remote Control
	Remote Control not working	Install new battery into the Remote Control. Reinitialize Remote Control where necessary
		Replace Remote Control Receiver or Remote Control where necessary. Initialize Remote Control and Remote Control Receiver.
	Defective 3-Position Switch	Replace 3-Position Switch
Flame Frozen	Defective Flicker Motor	Replace Flicker Motor
	Loose wiring	Check wiring connections
Flame not bright or flame not visible	Burnt light bulbs	Replace light bulbs
	Loose wiring	Check wiring connections
	Defective Light Harness	Replace Light Harness
Log set dim, not glowing (DF7420)	Burnt light bulbs	Replace light bulbs
Log set dim, not glowing (DF7425DXL)	Loose wiring	Check wiring connections
	Defective Log Set Driver	Replace Log Set Driver
Flame Shutter	Defective Flicker Motor	Replace Flicker Motor
Light leaking around the log set	Log set not positioned properly	Check log set for proper fit

PROBLEM	CAUSE	SOLUTION
Heater		
Heater is not turning off	Improper operation	Refer to Operation Section
	Defective Heater On/Off Switch	Replace Heater On/Off Switch
	Defective Thermostat	Replace Thermostat
Heater is not turning on, but flame effect is still functioning	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective Heater On/Off Switch	Replace Heater On/Off Switch
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
Heater is turning off after a couple of minutes of operation	Build up of dirt/dust in Heater Assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Heater emits an odor	Normal Operation	Normal operation is when the heater emits an odor for a brief period after the heater is initially turned on. The heater is burning off any dust accumulated during manufacturing or operation.
	Defective Heater Assembly	Replace Heater Assembly
Heater fan turns on but heater lacks heat	Improper operation	Refer to Operation Section
	Loose wiring	Trace wiring in unit
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
Heating element is glowing red	Normal Operation	Small glowing sections of the element are considered normal.
	Defective Heater Assembly	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace Heater Assembly.
Heater fan runs continuously	Loose wiring	Trace wiring in unit
	Defective Heater On/Off Switch	Replace Heater On/Off Switch
	Defective Thermostat	Replace Thermostat
	Defective Heater Assembly	Replace Heater Assembly
Noise		
Excessive noise with the heater on	Dirty Heater Assembly	Ensure that exterior intake louvers and firebox cavity are free of dirt/dust.
	Defective Heater Assembly	Replace Heater Assembly
Grinding or excessive noise with the heater off	Flicker rod hitting or rubbing against internal components	Ensure rod is straight and mounted properly in the bracket, spinning freely away from other components. Replace if necessary.
	Defective Flicker Motor	Replace Flicker Motor